

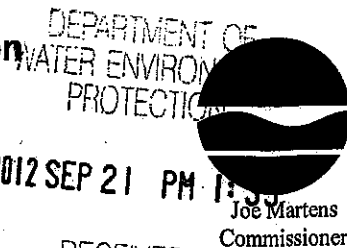
New York State Department of Environmental Conservation

Division of Environmental Permits, 4th Floor

625 Broadway, Albany, NY 12233-1750

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RECEIVED
ONONDAGA COUNTY

September 17, 2012

Mr. Tom Rhoads, P.E.
Commissioner
Onondaga Co. Dept. of Water Environment Protection
650 Hiawatha Blvd. West
Syracuse, NY 13204-1194

Re: Wetzel Road Wastewater Treatment Plant
DEC#7-3124-00019/00001 SPDES#: NY0027618

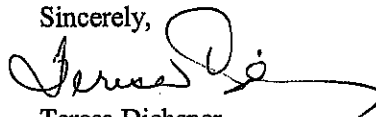
Dear Mr. Rhoads:

Enclosed is a final renewed State Pollutant Discharge Elimination System (SPDES) permit for the above referenced facility.

Comments were received on this modification from you and from Ms. Karen O'Brien, Acting NPDES Section Chief, Clean Water Regulatory Branch, US Environmental Protection Agency. These comments are addressed in the enclosed responsiveness summary.

Should you have questions on the administration of this modification and renewal, please feel free to contact me at the address or phone number listed above. Should you have technical questions on permit content, please contact the permit writer, John Weidman, at (518) 402-8197, or the Regional Water Engineer, Joseph Zalewski, at (315) 426-7500.

Sincerely,



Teresa Diehsner
Division of Environmental Permits

Enclosure

c: D. Bimber, RPA
J. Zalewski, RWE
J. Weidman, Permit Writer
C. Jamison, CO-BWP Permit Coordinator
M. Josilo, EPA Reg 2
NYSEFC
B. Kirschner, IJC
NYSDOH District Office

10:11 17 18 1925102

Responsiveness Summary
Wetzel Road WWTP
DEC ID 7-3124-00019/00001 NY0027618
Prepared By: John Weidman, Bureau of Water Permits
August, 2012

Background: The above referenced draft SPDES permit was developed after a full technical review was completed and a tentative determination was made to renew the permit. The draft permit was public noticed on 7/11/12 in the Environmental Notice Bulletin and on 7/10/2012 in The Post Standard. Comments dated 8/8/12 were received from Tom Rhoads, P.E., Onondaga County Department of Water Environment Protection (Permittee). Comments dated 8/7/12 were also received from Karen O'Brien, Acting NPDES Section Chief, Clean Water Regulatory Branch, US Environmental Protection Agency (USEPA), Region 2. As requested by USEPA, Region 2, a proposed permit was provided on 8/21/12. All comments are addressed below.

1. Comments received from Commissioner Tom Rhoads, Onondaga County Department of Water Environment Protection (Permittee)

Comment: General Comments - 750 Regulations

The Onondaga County Consolidated Sanitary District includes numerous towns and villages and the City of Syracuse. Effective incorporation of 6 NYCRR Part 750-2.9 into any County SPDES permit would require the County to assume broad regulatory and enforcement powers over these municipalities that are tributary to the County's facilities. This could embroil the County in legal challenges over, *inter alia*, perceived attempted County control over land use activities, municipal and private sewer facilities, and development decisions of constituent municipalities. See e.g., 6 NYCRR 750-2.9(a)(4) and (6).

Moreover, Part 750-2.9 assumes both a willingness and ability on the part of tributary municipalities to contract away local prerogatives and County authority to achieve such a result through local legislation. Therefore, the County reasserts--as in the past--strong opposition to inclusion of these requirements in any permit. In addition, the County previously provided the Department with a copy of comments on this issue as developed by NYWEA, and those NYWEA comments are similar to the County's on many items related to the inclusion of Part 750 language into SPDES permits.

Response: As specified in 40 CFR 122.41, all conditions applicable to NPDES permits and corresponding State programs shall be incorporated into permits either expressly or by reference. Therefore, the NYSDEC must include in the permit either expressly or by reference all general conditions. Furthermore, 6 NYCRR Part 750-2.9(a)(4) requires permittees to "enact, maintain and enforce or cause to be enacted, maintained and enforced up-to-date and effective sewer use law in all parts of the POTW service area." The regulation further states that "[s]uch enactment and enforcement shall include intermunicipal agreements and/or other enforceable legal instruments that allow the permittee to control discharges."

Comment: Page 1 of 19, Facility mailing address: Should be 4020 Wetzel Rd., Liverpool, NY 13090 (it is noted that the facility itself is located in the Town of Clay).

Response: The facility address listed on page 1 of the draft permit matches the address provided on the NY-2A SPDES application submitted by the County. However, the facility address has been updated as requested.

Comment: Page 2 of 19, Geographical Coordinates: Please revise coordinates as follows:

- Outfall 001 - 43°08'48.7"N, 76°14'10.5"W
- Outfall 002 - 43°08'48.5"N, 76°14'10.5"W
- Outfall 003 - 43°07'27.8"N, 76°15'0.75"W
- Outfall 005 - 43°8'52.9"N, 76°14'05.3"W

Response: The coordinates have been revised as requested.

Comment: Page 5 of 19: Phosphorus "type" excluded - should be monthly average.

Response: The phosphorus "type" of monthly average has been added as requested. In addition, the units for phosphorus were originally excluded on the draft permit as well and have now been added (mg/l).

Comment: Pages 4 & 5 of 19: It is requested that footnote 3 be redacted as no specific reopener is necessary for phosphorus.

Response: Footnote 3 has been deleted from the permit as requested. Permit will be revised accordingly if/when a TMDL is developed for the Seneca River/Three Rivers System.

Comment: Page 7 of 19: Delete note 3 - facility start-up was on January 1, 2010.

Response: Note 3 has been deleted as requested since start-up was on January 1, 2010 and the note is no longer necessary.

Comment: Page 8 of 19, Section 2.B.iv: It is requested the language for Equipment and Materials be changed to the following:

"Equipment and Materials - Equipment and materials which may contain mercury shall be evaluated by the permittee to determine if said materials are contributing to mercury effluent discharges. If the permittee determines after conducting such an evaluation that mercury containing equipment and materials are contributing to mercury discharges and that mercury-free alternatives that are cost/effective and provide comparable or better performance are available, permittee shall develop and submit for DEC approval a plan to replace such mercury-containing equipment and materials."

We believe that our proposed language more specifically describes the necessary action needed and meets the intent of reducing/eliminating mercury sources.

Response: As described in Section 4.2.1.1 of TOGS 1.3.10 (*Mercury - SPDES Permitting, Multiple Discharge Variance, and Water Quality Monitoring*) proper Multiple Discharge Variance (MDV) authorization requires that a permit be developed in

accordance with the TOGS 1.3.10. Permittees are considered to be authorized via the MDV only when their SPDES permit conforms exactly to the MDV guidance. Any deviation from this MDV guidance results in the need for authorization by an IDV, as described in section 4.2.2, or by a limit of 0.70 ng/L. Therefore, Mercury Minimization Program requirements must be included in permits exactly as provided in TOGS 1.3.10.

Comment: Page 12 of 19, No.7: Given Sawmill Pump Station Outfall 003 is 9 feet under water, the County requests that the inspection be conducted at the diversion structure of the pump station.

Response: Page 12 of the permit, No. 7, has been updated as requested by adding a note stating that that Outfall 003 (Sawmill Pump Station bypass) is located 9 feet under water and that the inspection can be conducted at the diversion structure of the pump station.

Comment: Page 17 and 18, Monitoring Locations: It is recommended that the DEC consider the attached drawings for inclusion in the permit, three (3) options for replacing the figure on page 17 (cleaner version of the site overview), and a revised monitoring location/process flow diagram with all the unit treatment processes for page 18. These images are available in Adobe (pdf) upon request.

Response: The monitoring locations pages of the permit (pages 17 and 18) have been updated to include two of the drawings provided by the County.

2. Comments received from Karen O'Brien, Acting NPDES Section Chief, Clean Water Regulatory Branch, United States Environmental Protection Agency, Region 2

Comment: Action Levels – the fact sheet does not provide enough information to clearly understand how the technology based effluent limits and action levels were created for toxic pollutions. Furthermore, the EPA recommends that NYSDEC express the action level as a concentration rather than a mass.

Response: The permit has been modified to require the reporting as both a concentration along with mass as is only required in the current permit. The fact sheet now includes an explanation that the previous action levels are being carried over and are sufficient to meet water quality based effluent limits and the action levels will be re-evaluated using concentration based effluent data during the next permit renewal process. The mass based water quality based effluent limits have also been added to the fact sheet for easier comparison with the proposed action levels.

Comment: Biosolids Language. In New York State, biosolids are governed by the Solid Waste Program under 6 NYCRR Part 360. All beneficial use facilities in New York State are required to obtain a Part 360 permit prior to operation. However, the EPA suggests that, where applicable, SPDES permits should include a condition requiring compliance with 6 NYCRR Part 360 in order to clearly inform the permittee of the full breadth of regulations regarding publically-owned treatment works (POTWs) and biosolids.

Response: No changes are necessary to the permit. The 6 NYCRR Part 360 regulations for biosolids are referenced in Part 750-1.2(a)(16), and are therefore included by reference on the last page of the permit.

Comment: General Conditions. The draft Wetzel Road WWTP permit does not adequately incorporate general permit conditions as required by federal regulations. As specified in 40 CFR § 122.41, all conditions applicable to NPDES permits and corresponding State programs shall be incorporated into permits either expressly or by reference. If incorporated by reference, specific citation to these regulations (or the corresponding approved State regulations) must be given in the permit. The NYSDEC must include in the permit, either expressly or by reference, all general conditions. In addition to the general conditions specific in 40 CFR § 122.41, that are application to all permittees, the EPA notes that additional conditions applicable to certain categories of NPDES permits in 40 CFR § 122.41 may apply.

Response: The last page of the permit will include language specific to General Conditions which EPA and DEC management have agreed to while negotiations on this topic continue.

Comment: Mercury – Since Wetzel Road WWTP permit term goes beyond the term of the Multiple Discharge Variance (MDV), the NYSDEC must establish a final WQBEL of 0.7 ng/L and specify the dates of applicability in the permit. The term of the MDV is October 2010 through September 2015. See section 4.2.1.1 of the MDV. NYSDEC should also consider establishing a reopener clause in the permit in the event that 2010 MDV is renewed during the permit term.

Response: While the Department agrees that TOGS 1.3.10 provides that the MDV is in effect “for five years from the effective date specified on page 1 of this document” it also states “After that date, high priority permits may not be renewed or modified unless they incorporate requirements of either a new MDV or an IDV, or include a limit of 0.70 ng/L. It is likely that the water quality goal will not be achieved for many years and that it will be necessary to pursue one or more subsequent MDVs in the future.”

Therefore, to clearly state the MDV term as provided in TOGS 1.3.10 the following footnote has been added to page 7 of the permit: “This permit may not be renewed or modified unless it incorporates requirements of either a new MDV or an Individual Discharge Variance (IDV), or include a limit of 0.70 ng/L.”

Typographical Errors

1. **Comment:** Section B(4)(c) of the Pretreatment Program Implementation Requirements in the draft permit reference the incorrect citation to the federal pretreatment regulations for public notification of significant non-compliance. The correct citation is 40 CFR 403.8(f)(2)(viii).

Response: Citation corrected as requested.

2. **Comment:** page 7 of the permit contains Note 3 which states that limits will be effective upon startup of the 7 MGD facility.

Response: Note 3 has been deleted.

3. **Comment:** Pages 4 and 5 of the draft permit contain a footnote reference and footnote regarding UOD. However, no limit or monitoring requirement has been established for UOD.

Response: These footnotes have been removed.

Comment: Whole Effluent Toxicity – The draft Wetzel Road WWTP contains action levels for WET. There is no reasonable potential analysis of WET in the fact sheet, however. WET effluent limits are requirement based on the determination of whether effluent is or may be discharged at a level that will cause, have reasonable potential to cause, or contribute to an excursion above any numeric WET criterion or narrative criterion within New York State Water Quality Standards at 6 NYCRR Part 700. It is not clear from the fact sheet that basis for establishing WET action levels and whether WET effluent limitations are required based on reasonable potential analysis. With no discussion of existing WET data, it is not clear how the permit meets the requirements of 40 CFR 122 or 132. Please provide an analysis of WET and, if applicable, WET effluent limitations.

Response: TOGS 1.3.2 provides an explanation of the Reasonable Potential Analysis process that is used. That explanation, which follows, has been added to the fact sheet.

The Reasonable Potential Determination (RPD) is applied to results of effluent toxicity data (minimum of 4 tests) to determine if a toxicity-based limit is required in the permit because of effluent variability. Toxicity testing should be placed in permits when chemical-based limitations are not adequate to regulate the discharge. A TRE will be required of the permittee if action levels or limits are exceeded at a 50% rate. During a TRE procedure, the limit may be deferred until the completion of the TRE to a time not to exceed five years from the initiation of the TRE. The permittees will be subjected to an RPD of their discharge data to determine if the effluent is likely to exceed an action level. This action level is based on a TU_a of 0.3 and a TU_c of 1 at the edge of the acute and chronic mixing zones respectively. If the RPD predicts an exceedance of the action level, the action level becomes the permit limit. Once the reasonable potential to exceed an action level is determined, the permit will be prioritized for modification (EBPS) and a WET limit (former action level) will be placed in the permit. In determining if a WET Limit can be established for an effluent, a situation may arise when the effluent has no acute or chronic toxicity. In cases when there is little dilution the multiplying factor may mathematically suggest a need for a WET limit. Since no toxicity in 100% effluent is essentially a non-detect, these data cannot be used to establish a WET limit. However, it is not recommended in these low dilution non toxic situations to drop toxicity testing from the permit because if any toxicity does occur in the discharge it may have serious impacts on the receiving water, and therefore the discharge requires monitoring. The action level would remain as such if the RPD indicated no need for a limit. The RPD multipliers are found in Table 1.

The evaluation for determining reasonable potential is as follows:

1. The action levels are determined for acute and chronic toxicity in the permit.
2. The permittee does a minimum of 4 tests in one year.
3. If no TRE is indicated, the data are subjected to an RPD. The most toxic result is identified.
4. NYSDEC Toxicity Testing Unit (TTU) uses the reasonable potential multiplier appropriate for the number of tests run to determine if the action level (potential limit) may be exceeded by the permittee. The RPD is done after 4 WET tests are submitted. Any single WET test may determine the need for a WET limit. If 10 or fewer tests are done, the RP multiplier is taken from Table 1. If more than 10 tests have been done the coefficient of variation is calculated and the multiplier is taken from Table 3.2 in the Technical Support Document for Water Quality-based Toxics Control EPA/505/2-90-001 March 1991.
5. If the action level is exceeded, the TTU recommends to the Permit writer that the permit be prioritized for modification to incorporate a WET limit into the permit. If the action level is not exceeded after application of the Reasonable Potential multiplier, no limit is required.
6. Note that all other requirements such as TREs apply. A limit may be deferred while the permittee is conducting a TRE. An example of how the data for a determination of reasonable potential appears in Appendix VI.



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT

First3.99

Industrial Code: **4952**
Discharge Class (CL): **05**
Toxic Class (TX): **N**
Major Drainage Basin: **07**
Sub Drainage Basin: **01**
Water Index Number: **Ont-66-12**
Compact Area: **IJC**

SPDES Number: **NY0027618**
DEC Number: **7-3124-00019/00001**
Effective Date (EDP): **09/17/2012**
Expiration Date (ExDP): **08/31/2017**
Modification Dates:(EDPM)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name: **Onondaga County**
Street: **650 Hiawatha Blvd. West**
City: **Syracuse**

Attention: **Tom Rhoads, Commissioner**

State: **NY** Zip Code: **13204-1194**

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: **Wetzel Road Wastewater Treatment Plant**
Location (C,T,V): **Clay (T)**
Facility Address: **4020 Wetzel Road**
City: **Liverpool**

County: **Onondaga**

State: **NY** Zip Code: **13090**

NYTM -E:

NYTM - N:

From Outfall No.: **001** at Latitude: **43 ° 08 ' 48.7 "** & Longitude: **76 ° 14 ' 10.5 "**

into receiving waters known as: **Seneca River** Class: **B**

and; (list other Outfalls, Receiving Waters & Water Classifications)

See Outfalls listing on Page 2 of this permit.

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth this permit; and 6 NYCRR Part 750-1.2(a) and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: **Onondaga County Department of Water Environment Protection**
Street: **650 Hiawatha Blvd. West**
City: **Syracuse**
Responsible Official or Agent: **Daniel Kelly, Head Operator**

State: **NY** Zip Code: **13204-1194**
Phone: **(315) 652-5595**

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

CO BWP - Permit Coordinator
RWE/RPA
EPA Region II - Michelle Josilo
NYSEFC
IJC
NYSDOH District Office

Deputy Chief Permit Administrator: Stuart M. Fox	
Address: Division of Environmental Permits 625 Broadway Albany, NY 12233-1750	
Signature: <i>Stuart M. Fox</i>	Date: 9/17/12

In accordance with 6 NYCRR Part 750-2.8(b)(2) and 40 CFR 122.41, bypass of the collection and treatment system without treatment are prohibited except when (1) the bypass is necessary to prevent loss of life, personal injury, public health hazard or severe property damage and (2) there is no feasible alternative to the bypass and (3) the permittee complies with the notice requirements in 6 NYCRR Part 750-2.7.

Bypassing from the following sanitary sewer overflow points in the Wetzel Road POTW that are known to or have the potential to be bypass points is prohibited except as noted above:

List of Discharges

<u>Outfall</u>	<u>Description</u>	<u>Location Coordinates</u>	<u>Receiving Waters, Classified</u>
001	STP Outfall Wetzel Road Clay (T)	43°08'48.7" N 76°14'10.5" W	Seneca River, Class B
002	Treatment Plant Bypass (after primary treatment) Wetzel Road Clay (T)	43°08'48.5" N 76°14'10.5" W	Seneca River, Class B
003	Pump Station Bypass Sawmill Pump Station Clay (T)	43°07'27.8" N 76°15'0.75" W	Seneca River, Class B

Stormwater Only Outfalls

004	Stormwater – catch basins, roof drains	43°08'48.9" N 76°14'08.6" W	Seneca River, Class B
005	Stormwater – catch basins, roof drains Clay (T)	43°08'52.9" N 76°14'05.3" W	Seneca River, Class B

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING		
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)		
PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE	
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.			
PARA-METER	EFFLUENT LIMIT	MINIMUM LEVEL (ML)	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters present in the sample unless otherwise specified. If a sample result is below the detection limit of the most sensitive method, compliance with the permit limit for that parameter was achieved. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This PQL can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2 which trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, temperature, or concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly. All monitoring periods (quarterly, semiannual, annual, etc) are based upon the calendar year unless otherwise specified in this Permit.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Note 1: DAILY DISCHARGE: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.

DAILY MAX.: The highest allowable daily discharge. **DAILY MIN.:** The lowest allowable daily discharge.

MONTHLY AVG: The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week.

30 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of : the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

7 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar week.

RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.

Note 2: ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	<input checked="" type="checkbox"/> Seasonal from <u>May 15</u> to <u>October 15</u>	Seneca River	09/17/2012	08/31/2017

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly average	7.0	MGD			Continuous	Recorder		X	
CBOD ₅	Monthly average	10	mg/l	584	lbs/d	2/week	24 hr Composite	X	X	(1)
CBOD ₅	7 day average	15	mg/l	876	lbs/d	2/week	24 hr Composite	X	X	
Solids, Suspended	Monthly average	30	mg/l	1752	lbs/d	2/week	24 hr Composite	X	X	(1)
Solids, Suspended	7 day average	45	mg/l	2628	lbs/d	2/week	24 hr Composite	X	X	
Solids, Settleable	Daily Max.	0.3	ml/l			3/day	Grab	X	X	
pH	Range	6.5 – 8.5	SU			3/day	Grab	X	X	
Nitrogen, Ammonia (as NH ₃)	Monthly average	1.0	mg/l			2/week	24 hr Composite	X	X	
Nitrogen, TKN (as N)	Monthly average	Monitor	mg/l			2/week	24 hr Composite	X	X	
Phosphorus, Total (as P)	Monthly average	1.0	mg/l			2/week	24 hr Composite	X	X	
Temperature	Daily Max.	Monitor	Deg C			3/day	Grab	X	X	
Dissolved Oxygen	Daily Minimum	7.0	mg/l			2/week	Grab		X	
Effluent Disinfection required: [] All Year [X] Seasonal from <u>May 15</u> to <u>Oct 15</u>										
Coliform, Fecal	30 day geometric mean	200	No./100 ml			2/week	Grab		X	
Coliform, Fecal	7 day geometric mean	400	No./100 ml			2/week	Grab		X	

FOOTNOTES: (1) Effluent shall not exceed 15 % and 15 % of influent concentration values for CBOD₅ & TSS respectively.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	[X] Seasonal from <u>October 16</u> to <u>May 14</u>	Seneca River	09/17/2012	08/31/2017

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly average	7.0	MGD			Continuous	Recorder		X	
CBOD ₅	Monthly average	25	mg/l	1460	lbs/d	2/week	24 hr Composite	X	X	(1)
CBOD ₅	7 day average	40	mg/l	2336	lbs/d	2/week	24 hr Composite	X	X	
		-		-						
Solids, Suspended	Monthly average	30	mg/l	1752	lbs/d	2/week	24 hr Composite	X	X	(1)
Solids, Suspended	7 day average	45	mg/l	2628	lbs/d	2/week	24 hr Composite	X	X	
Solids, Settleable	Daily Max.	0.3	ml/l			3/day	Grab	X	X	
pH	Range	6.5 – 8.5	SU			3/day	Grab	X	X	
Nitrogen, Ammonia (as NH ₃)	Daily Max.	Monitor	mg/l			2/week	24 hr Composite	X	X	
Nitrogen, TKN (as N)	Daily Max.	Monitor	mg/l			2/week	24 hr Composite	X	X	
Phosphorus (as P)	Monthly average	1.0	mg/l			2/week	24 hr Composite	X	X	
Temperature	Daily Max.	Monitor	Deg <u>C</u>			3/day	Grab	X	X	
Effluent Disinfection required: [<input type="checkbox"/>] All Year [<input checked="" type="checkbox"/>] Seasonal from <u>May 15</u> to <u>Oct 15</u>										
Coliform, Fecal	30 day geometric mean	200	No./100 ml			2/week	Grab		X	
Coliform, Fecal	7 day geometric mean	400	No./100 ml			2/week	Grab		X	

FOOTNOTES: (1) Effluent shall not exceed 15 % and 15 % of influent concentration values for CBOD₅ & TSS respectively.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	LEVELS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All year unless otherwise noted	Seneca River	09/17/2012	08/31/2017

PARAMETER	EFFLUENT LIMIT		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.					
WET - Acute Invertebrate			9.0	TUa	Quarterly	see footnote	1
WET - Acute Vertebrate			9.0	TUa	Quarterly	see footnote	1
WET - Chronic Invertebrate			60	TUc	Quarterly	see footnote	1
WET - Chronic Vertebrate			60	TUc	Quarterly	see footnote	1
Cyanide, Total (Note 2)			2.7 Monitor	lbs/day mg/l	Quarterly	8-hr.comp.	
Phenolics, Total (Note 1)(Note 2)			5.4 Monitor	lbs/day mg/l	Quarterly	8-hr.comp.	
Cadmium, Total			0.3 Monitor	lbs/day mg/l	Quarterly	24-hr.comp.	
Chromium, Total			1.4 Monitor	lbs/day mg/l	Quarterly	24-hr.comp.	
Copper, Total			4.1 Monitor	lbs/day mg/l	Quarterly	24-hr.comp.	
Lead, Total			1.2 Monitor	lbs/day mg/l	Quarterly	24-hr.comp.	
Nickel, Total			1.2 Monitor	lbs/day mg/l	Quarterly	24-hr.comp.	
Zinc, Total			5.0 Monitor	lbs/day mg/l	Quarterly	24-hr.comp.	
Di-N-Octylphthalate (Note 2)			1.0 Monitor	lbs/day mg/l	Quarterly	8-hr.comp.	
Iron, Total			250 Monitor	lbs/day mg/l	Quarterly	24-hr.comp.	
Mercury, Total		50		ng/l	Quarterly	Grab	(2)(3)

Footnotes:**1. Whole Effluent Toxicity (WET) Testing:**

Testing Requirements - WET testing shall consist of **Chronic only**. WET testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be *Ceriodaphnia dubia* (water flea - invertebrate) and *Pimephales promelas* (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24 hr composite samples with one renewal for Acute tests and three 24 hr composite samples with two renewals for Chronic tests). The appropriate dilution series bracketing the IWC and including one exposure group of 100% effluent should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test is required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 30:1 for acute, and 60:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

Footnotes – Continued

Monitoring Period - WET testing shall be performed at the specified sample frequency during calendar years ending in 4 and 9.

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: $TU_a = (100)/(48 \text{ hr LC50})$ or $(100)/(48 \text{ hr EC50})$ (note that Acute data is generated by both Acute and Chronic testing) and $TU_c = (100)/(NOEC)$ when Chronic testing has been performed or $TU_c = (TU_a) \times (10)$ when only Acute testing has been performed and is used to predict

Chronic test results, where the 48 hr LC50 or 48 hr EC50 and NOEC are expressed in % effluent. This must be done for both species and using the Most Sensitive Endpoint (MSE) or the lowest NOEC and corresponding highest TU_c . Report a TU_a of 0.3 if there is no statistically significant toxicity in 100% effluent as compared to control.

The complete test report including all corresponding results, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period to the Toxicity Testing Unit, Division of Water, 625 Broadway, Albany NY 12233. A summary page of the test results for the invertebrate and vertebrate species indicating TU_a , 48 hr LC50 or 48 hr EC50 for Acute tests and/or TU_c , NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Reduction Evaluation (TRE) in accordance with Department guidance. If such additional testing or performance of a TRE is necessary, the permittee shall be notified in writing by the Regional Water Engineer. The written notification shall include the reason(s) why such testing or a TRE is required.

2. EPA Method 1631 shall be used to analyze for Mercury.
3. This permit may not be renewed or modified unless it incorporates requirements of either a new MDV or an Individual Discharge Variance (IDV), or include a limit of 0.70 ng/L.

Note 1: Total Phenolics shall be analyzed using the 4-aminoantipyrine (4-AAP) method.

Note 2: The 8-hr. Composites shall consist of three (3) grab samples over the eight (8) hour work day that are combined in the laboratory prior to analysis.

MERCURY MINIMIZATION PROGRAM – High Priority POTWs

1. **General** - The permittee shall develop, implement, and maintain a Mercury Minimization Program (MMP). The MMP is required because the 50 ng/L permit limit exceeds the statewide water quality based effluent limit (WQBEL) of 0.70 nanograms/liter (ng/L) for Total Mercury. The goal of the MMP will be to reduce mercury effluent levels in pursuit of the WQBEL. Note – The mercury-related requirements in this permit conform to the mercury Multiple Discharge Variance specified in NYSDEC policy *DOW 1.3.10*.
2. **MMP Elements** - The MMP shall be documented in narrative form and shall include any necessary drawings or maps. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. As a minimum, the MMP shall include an on-going program consisting of: periodic monitoring designed to quantify and, over time, track the reduction of mercury; an acceptable control strategy for reducing mercury discharges via cost-effective measures, which may include more stringent control of tributary waste streams; and submission of periodic status reports.
 - A. **Monitoring** - The permittee shall conduct periodic monitoring designed to quantify and, over time, track the reduction of mercury. All permit-related wastewater and stormwater mercury compliance point (outfall) monitoring shall be performed using EPA Method 1631. Use of EPA Method 1669 during sample collection is recommended. Unless otherwise specified, all samples shall be grabs. Monitoring at influent and other locations tributary to compliance points may be performed using either EPA Methods 1631 or 245.7. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring shall be coordinated so that the results can be effectively compared between internal locations and final outfalls. Minimum required monitoring is as follows:
 - i. **Sewage Treatment Plant Influent & Effluent, and Type II SSO Outfalls** - Samples at each of these locations must be collected in accordance with the minimum frequency specified on the mercury permit limits page.
 - ii. **Key Locations in the Collection System and Potential Significant Mercury Sources** - The minimum monitoring frequency at these locations shall be semi-annual. Monitoring of properly treated dental facility discharges is not required.
 - iii. **Hauled Wastes** - Hauled wastes which may contain significant mercury levels must be periodically tested prior to acceptance to ensure compliance with pretreatment/local limits requirements and/or determine mercury load.
 - iv. Additional monitoring must be completed as may be required elsewhere in this permit or upon Department request.
 - B. **Control Strategy** - An acceptable control strategy is required for reducing mercury discharges via cost-effective measures, including but not limited to more stringent control of industrial users and hauled wastes. The control strategy will become enforceable under this permit and shall contain the following minimum elements:
 - i. **Pretreatment/Local Limits** - The permittee shall evaluate and revise current requirements in pursuit of the goal.
 - ii. **Periodic Inspection** - The permittee shall inspect users as necessary to support the MMP. Each dental facility shall be inspected at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6NYCRR Part 374.4. Other mercury sources shall also be inspected once every five years. Alternatively, the permittee may develop an outreach program which informs these users of their responsibilities once every five years and is supported by a subset of site inspections. Monitoring shall be performed as above.
 - iii. **Systems with CSO & Type II SSO Outfalls** - Priority shall be given to controlling mercury sources upstream of CSOs and Type II SSOs through mercury reduction activities and/or controlled-release discharge. Effective control is necessary to avoid the need for the Department to establish mercury permit limits at these outfalls.
 - iv. **Equipment and Materials** - Equipment and materials which may contain mercury shall be evaluated by the permittee and replaced with mercury-free alternatives where environmentally preferable.
 - C. **Annual Status Report** - An annual status report shall be submitted to the Regional Water Engineer and to the Bureau of Water Permits summarizing: (a) all MMP monitoring results for the previous year; (b) a list of known and potential mercury sources; (c) all action undertaken pursuant to the strategy during the previous year; (d) actions planned for the upcoming year; and, (e) progress toward the goal. The first annual status report is due one year after the permit is modified to include the MMP requirement and follow-up status reports are due annually thereafter. A file shall be maintained containing all MMP documentation, including the dental forms required by 6NYCRR Part 374.4, which shall be available for review by NYSDEC representatives. Copies shall be provided upon request.
3. **MMP Modification** - The MMP shall be modified whenever: (a) changes at the facility or within the collection system increase the potential for mercury discharges; (b) actual discharges exceed 50 ng/L; (c) a letter from the Department identifies inadequacies in the MMP; or, (d) pursuant to a permit modification.

PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS

- A. **DEFINITIONS.** Generally, terms used in this Section shall be defined as in the General Pretreatment Regulations (40 CFR Part 403). Specifically, the following definitions apply to terms used in this Section (PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS):
1. Categorical Industrial User (CIU)- an industrial user of the POTW that is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N;
 2. Local Limits - General Prohibitions, specific prohibitions and specific limits as set forth in 40 CFR 403.5.
 3. The Publicly Owned Treatment Works (the POTW) - as defined by 40 CFR 403.3(q) and that discharges in accordance with this permit.
 4. Program Submission(s) - requests for approval or modification of the POTW Pretreatment Program submitted in accordance with 40 CFR 403.11 or 403.18 and approved by letter dated June 11, 1984.
 5. Significant Industrial User (SIU) -
 - a. CIUs;
 - b. Except as provided in 40 CFR 403.3(v)(3), any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) to the POTW;
 - c. Except as provided in 40 CFR 403.3(v)(3), any other industrial user that contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;
 - d. Any other industrial user that the permittee designates as having a reasonable potential for adversely affecting the POTW's operation or for violating a pretreatment standard or requirement.
 6. Substances of Concern - Substances identified by the New York State Department of Environmental Conservation Industrial Chemical Survey as substances of concern.
- B. **IMPLEMENTATION.** The permittee shall implement a POTW Pretreatment Program in accordance 40 CFR Part 403 and as set forth in the permittee's approved Program Submission(s). Modifications to this program shall be made in accordance with 40 CFR 403.18. Specific program requirements are as follows:
1. Industrial Survey. To maintain an updated inventory of industrial dischargers to the POTW the permittee shall:
 - a. Identify, locate and list all industrial users who might be subject to the industrial pretreatment program from the pretreatment program submission and any other necessary, appropriate and available sources. This identification and location list will be updated, at a minimum, every five years. As part of this update the permittee shall collect a current and complete New York State Industrial Chemical Survey form (or equivalent) from each SIU.
 - b. Identify the character and volume of pollutants contributed to the POTW by each industrial user identified in B.1.a above that is classified as a SIU.
 - c. Identify, locate and list, from the pretreatment program submission and any other necessary, appropriate and available sources, all significant industrial users of the POTW.
 2. Control Mechanisms. To provide adequate notice to and control of industrial users of the POTW the permittee shall:
 - a. Inform by certified letter, hand delivery courier, overnight mail, or other means which will provide written acknowledgment of delivery, all industrial users identified in B.1.a. above of applicable pretreatment standards and requirements including the requirement to comply with the local sewer use law, regulation or ordinance and any applicable requirements under section 204(b) and 405 of the Federal Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

- b. Control through permit or similar means the contribution to the POTW by each SIU to ensure compliance with applicable pretreatment standards and requirements. Permits shall contain limitations, sampling frequency and type, reporting and self-monitoring requirements as described below, requirements that limitations and conditions be complied with by established deadlines, an expiration date not later than five years from the date of permit issuance, a statement of applicable civil and criminal penalties and the requirement to comply with Local Limits and any other requirements in accordance with 40 CFR 403.8(f)(1).
 3. Monitoring and Inspection. To provide adequate, ongoing characterization of non-domestic users of the POTW, the permittee shall:
 - a. Receive and analyze self-monitoring reports and other notices. The permittee shall require all SIUs to submit self-monitoring reports at least every six months unless the permittee collects all such information required for the report, including flow data.
 - b. The permittee shall adequately inspect each SIU at a minimum frequency of once per year.
 - c. The permittee shall collect and analyze samples from each SIU for all priority pollutants that can reasonably be expected to be detectable at levels greater than the levels found in domestic sewage at a minimum frequency of once per year.
 - d. Require, through permits, each SIU to collect at least one 24 hour, flow proportioned composite (where feasible) effluent sample every six months and analyze each of those samples for all priority pollutants that can reasonably be expected to be detectable in that discharge at levels greater than the levels found in domestic sewage. The permittee may perform the aforementioned monitoring in lieu of the SIU except that the permittee must also perform the compliance monitoring described in 3.c.
 4. Enforcement. To assure adequate, equitable enforcement of the industrial pretreatment program the permittee shall:
 - a. Investigate instances of noncompliance with pretreatment standards and requirements, as indicated in self-monitoring reports and notices or indicated by analysis, inspection and surveillance activities. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Enforcement activities shall be conducted in accordance with the permittee's Enforcement Response Plan developed and approved in accordance with 40 CFR Part 403.
 - b. Enforce compliance with all national pretreatment standards and requirements in 40 CFR Parts 406 - 471.
 - c. Provide public notification of significant non-compliance as required by 40 CFR 403.8(f)(2)(viii).
 - d. Pursuant to 40 CFR 403.5(e), when either the Department or the USEPA determines any source contributes pollutants to the POTW in violation of Pretreatment Standards or Requirements the Department or the USEPA shall notify the permittee. Failure by the permittee to commence an appropriate investigation and subsequent enforcement action within 30 days of this notification may result in appropriate enforcement action against the source and permittee.
 5. Record keeping. The permittee shall maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by SIUs. Records shall be maintained in accordance with 6 NYCRR Part 750-2.5(c).
 6. Staffing. The permittee shall maintain minimum staffing positions committed to implementation of the Industrial Pretreatment Program in accordance with the approved pretreatment program.
- C. SLUDGE DISPOSAL PLAN. The permittee shall notify NYSDEC, and USEPA as long as USEPA remains the approval authority, 60 days prior to any major proposed change in the sludge disposal plan. NYSDEC may require additional pretreatment measures or controls to prevent or abate an interference incident relating to sludge use or disposal.

PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

- D. **REPORTING.** The permittee shall provide to the offices listed on the Monitoring, Reporting and Recording page of this permit and to the Chief Water Compliance Branch; USEPA Region II; 290 Broadway; New York, NY 10007; a periodic report that briefly describes the permittee's program activities over the previous year. This report shall be submitted to the above noted offices within 60 days of the end of the reporting period. The reporting period shall be ANNUAL, with reporting period(s) ending on December 31.

The periodic report shall include:

1. **Industrial Survey.** Updated industrial survey information in accordance with 40 CFR 403.12(i)(1) (including any NYS Industrial Chemical Survey forms updated during the reporting period).
2. **Implementation Status.** Status of Program Implementation, to include:
 - a. Any interference, upset or permit violations experienced at the POTW directly attributable to industrial users.
 - b. Listing of significant industrial users issued permits.
 - c. Listing of significant industrial users inspected and/or monitored during the previous reporting period and summary of results.
 - d. Listing of significant industrial users notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing should include for each facility the final date of compliance.
 - e. Summary of POTW monitoring results not already submitted on Discharge Monitoring Reports and toxic loadings from SIU's organized by parameter.
 - f. A summary of additions or deletions to the list of SIUs, with a brief explanation for each deletion.
3. **Enforcement Status.** Status of enforcement activities to include:
 - a. Listing of significant industrial users in Significant Non-Compliance (as defined by 40 CFR 403.8(f)(2)(viii)) with federal or local pretreatment standards at end of the reporting period.
 - b. Summary of enforcement activities taken against non-complying significant industrial users. The permittee shall provide a copy of the public notice of significant violators as specified in 40 CFR Part 403.8(f)(2)(viii).

BEST MANAGEMENT PRACTICES (BMPs) FOR SANITARY SEWER SYSTEMS WITH ACTIVE OVERFLOWS:

1. Dry weather overflows of the sewer system are prohibited. The occurrence of any dry weather overflow shall be promptly abated and reported to the NYSDEC regional office within 24 hours of detection. A written compliance report shall also be provided within five days of the time the permittee becomes aware of the occurrence. Such reports shall contain the information listed 6 NYCRR Part 750-2.7(d) of this permit.
2. The permittee shall optimize the sewer system by operating and maintaining it to minimize the discharge of pollutants from overflows.
3. No new source of storm water shall be connected to any separate sanitary sewer in the collection system.
4. Sanitary sewer extensions shall be designed and constructed without storm sewer interconnections.
5. The permittee shall maximize flow up to the peak design capacity to the POTW Treatment Plant during periods of wet weather.
6. The permittee shall submit to the Regional Water Engineer a Monthly Overflow Report summarizing, for each day that an overflow occurs any overflow points, an estimate of the total volume and duration of each overflow, measurements of the total amount of rainfall, a description of the source of each overflow and visual observations of water quality at each outfall.
7. The permittee shall conduct a maintenance and inspection program of pumping stations and the overflow facilities at outfalls No. 002 through 003. This program shall consist of minimum monthly inspections with required repair, cleaning and maintenance done as needed. This is to insure that no discharges occur during dry weather and that the maximum amount of wet weather flow is conveyed to the POTW treatment plant for treatment. All maintenance and inspection program activities including visual observations of the condition of equipment and any repair work required shall be summarized and attached with the Monthly Overflow Report. It is noted that Outfall 003 (Sawmill Pump Station bypass) is located 9 feet under water, therefore the inspection can be conducted at the diversion structure of the pump station.
8. By attaching a letter to the monthly operating report, the permittee shall inform the Department of all reported instances known to the permittee of sewage backing up into houses or discharge of raw sewage from surcharging manholes onto the ground surface and the conditions (wet weather, sewer blockage, etc) which caused this to occur.
9. If, there are documented, recurrent instances of sewage backing up into house(s) or discharge of raw sewage onto the ground surface from surcharging manhole(s) the permittee shall, upon letter notification from DEC, prohibit further connections, except as provided below, that would make the surcharging/backup problems worse.

Connections may be allowed by the permittee prior to long term remediation of the problem provided that the units to be connected had received building permits prior to determination of a recurrent surcharging/backup situation; or (1) 'reasonable relief measures' have been taken to reduce infiltration/inflow flow rates and maximize sewage transmission in the area effected and (2) for each home equivalent to be connected, those measures will provide more than 5 gallons per minute (GPM) additional sewage transmission capacity to the area effected by surcharging/backup problems and (3) if long term remediation is necessary, the permittee has entered consent order negotiations or is in compliance with an enforceable (permit or consent order) schedule to eliminate the recurrent surcharging/backup problems. In the event that negotiations to enter into a consent order are unsuccessful, the DEC may, by letter notification, serve notice that all further connections that would make surcharging/backup problems worse will be prohibited.

The 'reasonable relief measures' taken and the connections allowed shall be summarized in a letter attachment to the monthly operating report.

'Reasonable relief measures' may include, but are not limited to, permanent disconnections of a sump pump, roof leader or a footing drain; substantial elimination of inflow and infiltration from a manhole; repair of cracked pipe, bad joint or house lateral connection; cleaning of sewage transmission devices such as sewers, force mains, and siphons; pump rehabilitation; rehabilitation of vent risers; etc.

10. The permittee shall implement a public notification program to inform citizens of the location and occurrence of SSO events. This program shall include a mechanism (public media broadcast, standing beach advisories, newspaper notice etc.) to alert potential users of the receiving waters affected by SSOs. The program shall include a system to determine the nature and duration of conditions that are potentially harmful to users of these receiving waters due to SSOs.
11. The permittee shall submit an annual report summarizing implementation of the above best management practices (BMPs). The report shall list existing documentation of implementation of the BMPs and shall be submitted by March 1st of each year to the Regional Water Engineer and the Bureau of Water Permits, 625 Broadway, Albany, NY 12233-3505. The actual documentation shall be stored at the treatment plant and be made available to DEC upon request.

STORM WATER POLLUTION PREVENTION PLAN FOR POTWs WITH STORMWATER OUTFALLS

1. **General** - The Department has determined that stormwater discharges from POTWs with design flows at or above 1 mgd shall be covered under the SPDES permit. If the permittee has already submitted a Notice of Intent to the Department for coverage under the General Storm Water permit, the permittee shall submit a Notice of Termination to the Department upon receipt of this final SPDES permit containing the requirement to develop a SWPPP.

The permittee is required to develop, maintain, and implement a Storm Water Pollutant Prevention Plan (SWPPP) to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and other stormwater discharges including, but not limited to, drainage from raw material storage.

The SWPPP shall be documented in narrative form and shall include the 13 minimum elements below and plot plans, drawings, or maps necessary to clearly delineate the direction of stormwater flow and identify the conveyance, such as ditch, swale, storm sewer or sheet flow, and receiving water body. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the SWPPP and may be incorporated by reference. A copy of the current SWPPP shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.

2. **Compliance Deadlines** - The initial completed SWPPP shall be submitted by **02/17/2013** to the Regional Water Engineer. The SWPPP shall be implemented within 6 months of submissions, unless a different time frame is approved by the Department. The SWPPP shall be reviewed annually and shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the SWPPP is inadequate, or (c) a letter from the Department identifies inadequacies in the SWPPP. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All SWPPP revisions (with the exception of minimum elements - see item (4.B.) below) must be submitted to the Regional Water Engineer within 30 days. Note that the permittee is not required to obtain Department approval of the SWPPP (or of any minimum elements) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases.

The review shall address all substances present at the facility that are identified in Tables 6-10 of SPDES application Form NY-2C (available at <http://www.dec.state.ny.us/website/dcs/permits/olpermits/form2c.pdf>) as well as those that are required to be monitored by the SPDES permit.

4. **A. 13 Minimum elements** - Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify Best Management Practices (BMPs) that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of minimum elements of the SWPPP and BMPs is available in the September 1992 manual *Storm Water Management for Industrial Activities*, EPA 832-R-92-006 (available on-line at <http://nepis.epa.gov/pub/titlesOW.htm>) At a minimum, the plan shall include the following elements:

- | | | |
|-------------------------------------|----------------------------------------------------------|---------------------------------|
| 1. Pollution Prevention Team | 6. Security | 10. Spill Prevention & Response |
| 2. Reporting of BMP Incidents | 7. Preventive Maintenance | 11. Erosion & Sediment Control |
| 3. Risk Identification & Assessment | 8. Good Housekeeping | 12. Management of Runoff |
| 4. Employee Training | 9. Materials/Waste Handling,
Storage, & Compatibility | 13. Street Sweeping |
| 5. Inspections and Records | | |

Note that for some facilities, especially those with few employees, some of the above may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the SWPPP that do not apply to your facility, along with an explanation, for instance if street sweeping did not apply because no streets exist at the facility.

STORM WATER POLLUTION PREVENTION PLAN FOR POTWs WITH STORMWATER OUTFALLS (Continued)

B. Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater From Construction Activity to Surface Waters - As part of the erosion and sediment control element, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges. SWPPPs are not required for discharges of stormwater from construction activity to groundwaters.

The SWPPP shall conform to the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual*, unless a variance has been obtained from the Regional Water Engineer, and to any local requirements. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity at least 30 days prior to soil disturbance. The SWPPP shall also be submitted to the Regional Water Engineer if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise, the SWPPP shall be submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at www.dec.state.ny.us/website/dow/toolbox/swforms.html) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges, nor are any additional permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP is properly implemented.

DISCHARGE NOTIFICATION REQUIREMENTS

- (a) Except as provided in (c) of these Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit. Such signs shall be installed within 90 days of the Effective Date of this Modification.
- (b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.
- (c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.
- (d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have minimum dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY _____

OUTFALL No.: _____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: () - ### - #####

OR:

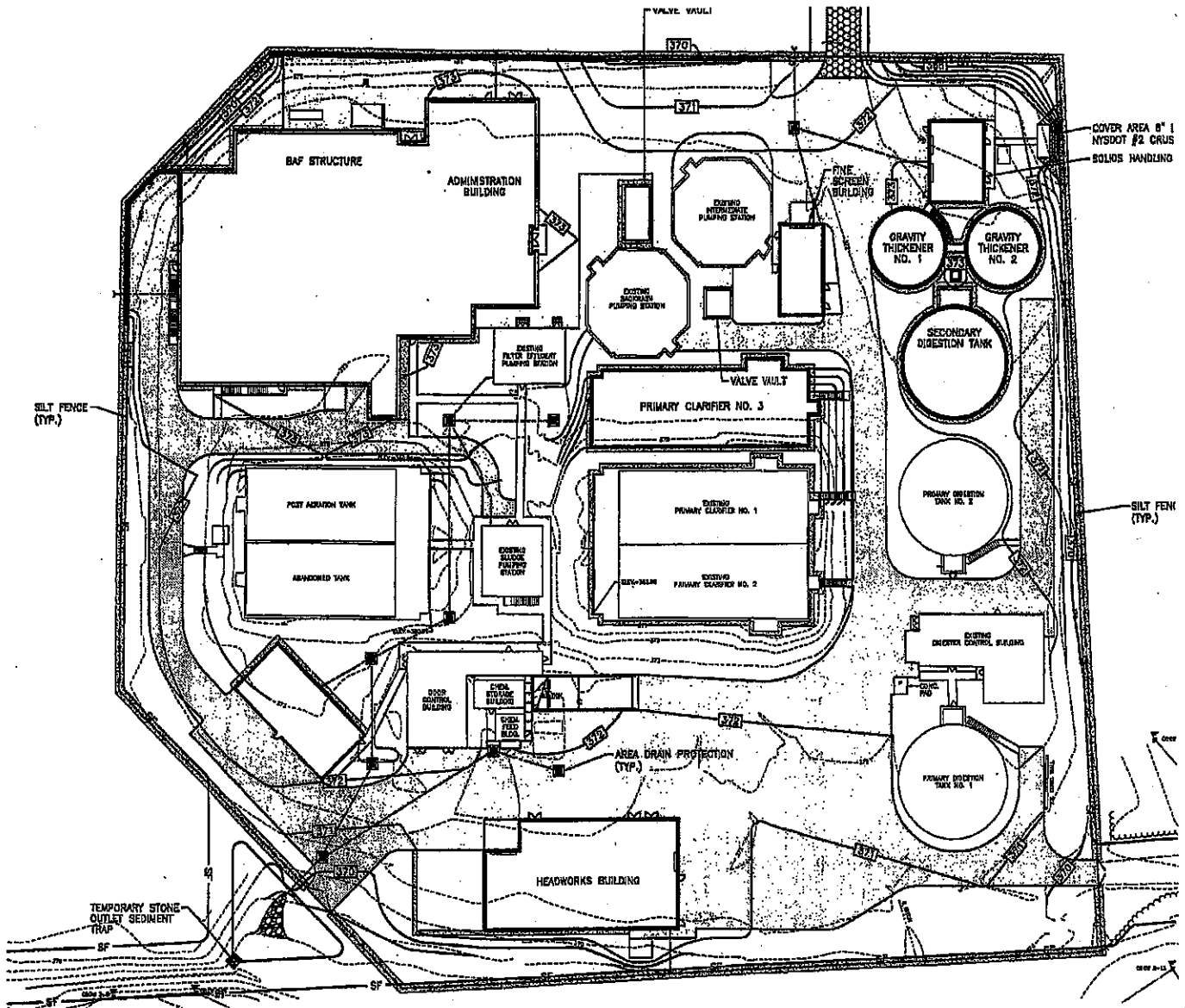
NYSDEC Division of Water Regional Office Address:

NYSDEC Division of Water Regional Phone: () - ### - #####

- (e) For each discharge required to have a sign in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the Discharge Monitoring Reports (DMRs), as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of five years.
- (f) The permittee shall periodically inspect the outfall identification signs in order to ensure that they are maintained, are still visible and contain information that is current and factually correct.

MONITORING LOCATIONS

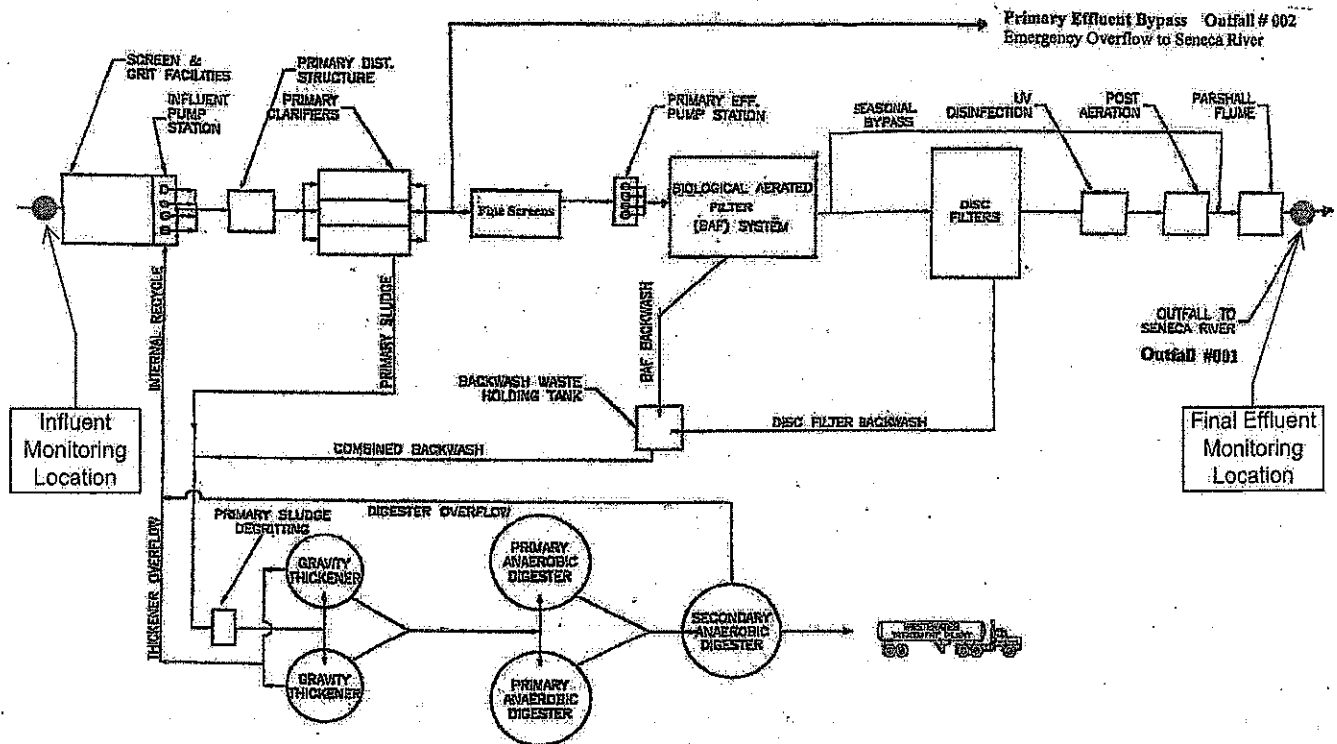
The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:



MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:

Wetzel Road Wastewater Treatment Plant (WWTP)
Process Flow Diagram/Schematic with Monitoring Locations



RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

a) 6 NYCRR Part 750 is hereby incorporated by reference and its conditions are enforceable requirements of this permit. The permittee shall comply with all conditions set forth in this permit and with 6 NYCRR Part 750, including, but not limited to: additional monitoring and reporting requirements and conditions, including noncompliance reporting.

b) The monitoring information required by this permit shall be summarized, signed and retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

☒ (if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

☐ (if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.

☒ (if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:

☒ Regional Water Engineer and/or ☒ County Health Department or Environmental Control Agency specified below

Send the original (top sheet) of each DMR page to:

Department of Environmental Conservation
Division of Water, Bureau of Water Compliance
625 Broadway, Albany, New York 12233-3506
Phone: (518) 402-8177

Send the first copy (second sheet) of each DMR page to:

Department of Environmental Conservation
Regional Water Engineer, Region 7
615 Erie Boulevard West
Syracuse, New York 13204
Phone: (315) 426-7500

Send an additional copy of each DMR page to:

Onondaga County Health Department
PO Box 190
Syracuse, NY 13215-0190

- c) Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- d) More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.
- e) Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- f) Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- g) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.
- h) In addition to a) above, all POTWs shall provide adequate notice to the Department and USEPA of the following: (1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; and (2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. (3) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

Municipal SPDES Permit Fact Sheet

I. SUMMARY OF PROPOSED PERMIT CHANGES

A SPDES permit renewal is proposed for the Wetzel Road Wastewater Treatment Plant. Following is a summary of the proposed changes in the draft permit as compared to the currently effective permit, the details of these changes are specified below and in the draft permit:

Updated and renumbered list of outfalls on Page 2 of the permit, which included:

- Changing Sawmill Pump Station outfall number to 003 (from 004).
- Adding Outfalls 004 and 005 (stormwater only outfalls).

Added Best Management Practices requirements for Sanitary Sewer Systems with Active Overflows: Due to two sanitary sewer system bypasses (Sawmill Pump Station bypass and Treatment Plant Bypass – after primary treatment) the permittee will be required to maintain best management practices for sanitary sewer systems. These requirements are found on page 12 of the permit.

Added requirement for a Stormwater Pollution Prevention Plan: POTWs with a design flows at or above 1.0 mgd with stormwater outfalls are required to develop a stormwater pollution prevention plan to minimize contamination of stormwater run-off from the facility. There are two stormwater outfalls at the Wetzel Road WWTP. These requirements are found on page 14 of the permit.

Added permit limit of 50 ng/l for Mercury as per requirements outlined in TOGS 1.3.10. Also added Mercury Minimization Plan requirements to permit which is on page 8 of the permit.

Added Whole Effluent Toxicity (WET) Testing with action levels as required by TOGS 1.3.2.

Action Levels for Outfall 001 – The permit has been modified to require the reporting as both a concentration along with mass as is only required in the current permit.

Please note that when the Department updates a permit this typically includes updated forms incorporating the latest general conditions.

II. BACKGROUND INFORMATION

As noted throughout this document, SPDES permits are based on both federal and state requirements - law, regulation, policy, and guidance. These can generally be found on the internet. Current locations include: Clean Water Act (CWA) www.epa.gov/lawsregs/laws/index.html#env; Environmental Conservation Law (ECL) www.dec.ny.gov/regulations/40195.html; federal regulations www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR; state environmental regulations www.dec.ny.gov/regulations/regulations.html; NYSDEC water policy www.dec.ny.gov/regulations/2654.html.

A. Administrative History

The current SPDES permit for the facility became effective on 9/1/2007 and has an expiration date of 8/31/2012.

On March 7, 2012, the permittee submitted a permit renewal application form NY-2A and sampling data. Following a review of the application and sampling data the permit has been modified as discussed above.

B. Outfall and Receiving Water Information

The facility discharges, or proposes to discharge, wastewater and/or stormwater to waters of the state via the following outfalls:

The facility discharges treated sewage through Outfall 001. The treatment plant was constructed in 1968 and was upgraded and expanded in 2008 to provide advanced secondary treatment of wastewater using a Biological Aerated Filter (BAF) System. The current treatment plant includes: Screening and grit removal, primary clarification, fine screening, Biological Aerated Filtration, Cloth Media Disk Filtration and UV disinfection. Solids from the primary clarifiers and the BAF backwash holding tank settle out in two gravity thickener tanks. Collected solids from these tanks are pumped to two primary anaerobic digesters, then to one secondary anaerobic digester for digestion of remaining organic material. Sludge from the Secondary Anaerobic Digester is removed via tanker truck to the Metropolitan-Syracuse WWTP for further treatment.

The draft permit details known and possible Sanitary Sewer Overflows (SSOs) within the collection system tributary to the collection system. Bypass from these outfalls is prohibited except as noted in 6 NYCRR Part 750-2.8(b)(2) and 40 CFR 122.41. These SSOs are identified as Outfall(s) 002 (treatment plant bypass after primary treatment) and 003 (Sawmill Pump Station bypass) in the draft permit. No treatment is provided for these outfall(s).

The location of the outfall(s), and the name, classification, and index numbers of the receiving waters are indicated in the *Outfall & Receiving Water Location Table* at the end of this fact sheet. The classifications of individual surface waters are specified in 6 NYCRR Parts 800 – 941. The best uses and other requirements applicable to the specific water classes are specified in 6 NYCRR Part 701.

The 7Q10 flow was obtained from USGS and DEC documentation. Mixing zone analyses are conducted in accordance with the following documents: EPA T.S.D, entitled "Water Quality Based Toxics Control," dated March, 1991; EPA Region VIII "Mixing Zones and Dilution Policy", dated December, 1994; NYSDEC TOGS 1.3.1, entitled "Total Maximum Daily Loads and Water Quality Based Effluent Limits." Other critical receiving water data for Temperature, pH, hardness and/or salinity were based on conservative estimates and historical DEC records. This flow information is listed in the *Pollutant Summary Table* at the end of this fact sheet together with applicable ambient water quality criteria, ambient background data (if available), and outfall pollutant data.

Impaired Waterbody Information – The CWA requires states to identify impaired waters, where designated uses are not fully supported. For these impaired waters/pollutants, states must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) restricting waterbody uses. In 1998 the Seneca River was listed as impaired due to Dissolved Oxygen/Oxygen Demands from invasive species and agriculture. A TMDL has been developed to address the impairment and includes limits for CBOD5, Ammonia, Dissolved Oxygen and Phosphorus and the current permit already includes these water quality based effluent limits.

C. Discharge Composition

The *Pollutant Summary Table* at the end of this fact sheet presents the existing effluent quality of the facility. Concentration and mass data are presented, based on Discharge Monitoring Report (DMR), permit application, and possibly other data submitted by the permittee for the period February 2009 to January 2012.

D. Compliance History

A review of the facility's DMRs and other compliance information from February 2009 to January 2012 shows that the facility had the following violations:

<u>Date</u>	<u>Parameter</u>	<u>Limit</u>	<u>Reported Value</u>
1. August 2011	Fecal Coliform (30 day)	200/100ml	>20 ¹
2. August 2011	Fecal Coliform (7 day)	400/100ml	>200 ¹

1. Violations were due to failure of computerized control program which caused the BAF aeration system to shut down for 11 hrs, allowing for the pass through of additional suspended solids, which interfered with the UV disinfection system. No other violations have been reported.

III. PROPOSED PERMIT REQUIREMENTS

Sections 101, 301(b), 304, 308, 401, 402, and 405 of the Clean Water Act (CWA) provide the basis for the effluent limitations and other conditions in the draft permit. The NYSDEC evaluates discharges with respect to these sections of the CWA, New York State Environmental Conservation Law, and the relevant federal/state regulations, policy, and guidance to determine which conditions to include in the draft permit.

For existing permittees, the previous permit typically forms the basis for the next permit. Permit revisions are implemented where justified due to changed conditions at the facility and/or in response to updated regulatory requirements.

A. Effluent Limitations

If applicable, the existing permit limits are evaluated to determine if these should be continued, revised, or deleted. Generally, existing limits are continued unless there is justification to do otherwise. Other pollutant monitoring data are also reviewed to determine the presence of additional contaminants that should be included in the permit.

The permit writer determines the **technology-based effluent limits (TBELs)** that must be incorporated into the permit. A TBEL requires a minimum level of treatment for industrial point sources based on currently available treatment technologies and/or Best Management Practices (BMPs). The Department then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances to occur, **water quality-based effluent limits (WQBELs)** must be included in the permit. A WQBEL is designed to ensure that the water quality standards of receiving waters are being met. In general, the Clean Water Act requires that the effluent limits for a particular pollutant are the more stringent of either the TBEL or WQBEL.

1. TBELs & Anti-Backsliding:

Sections 301(b)(1)(B) and 304(d)(1) of the CWA require technology-based controls, known as secondary treatment, on POTW effluents. The applicable federal regulations are specified in 40 CFR Part 133.102. These and other requirements are summarized in TOGS 1.3.3.

Anti-backsliding requirements are specified in the CWA, sections 402(o) and 303(d)(4), and regulations at 40 CFR 122.44(l). These requirements are summarized in TOGS 1.2.1. Generally, the regulations prohibit the relaxation of effluent limits in reissued permits unless one of the specified exceptions applies. In practice, limits in reissued permits will generally be no less stringent than previous permit limits to ensure compliance with anti-backsliding requirements. Otherwise, the specific exceptions that allow backsliding will be cited on a case-by-case basis.

Following is the TBEL & Anti-backsliding assessment for each pollutant present in the discharge(s). A summary of this analysis is provided in the *Pollutant Summary Table* at the end of this fact sheet.

Pollutant-Specific TBEL & Anti-Backsliding Analysis:

In addition to the concentration limits noted below, 40 CFR 122.45(f) requires that SPDES permits contain mass-based limits for most pollutants. Mass-based limits in lbs/day are derived by multiplying the design flow in MGD by the concentration limit in mg/L by a conversion factor of 8.34. Limits are typically expressed using two significant figures.

Outfall 001:

Flow – Consistent with TOGS 1.3.3, a monthly average flow limit of 7.0 MGD is specified, which is equal to the design capacity of the treatment plant. This limit is being carried over from the previous permit.

pH range – 40 CFR 133.102 requires that the effluent pH be within the range of 6.0 to 9.0 standard units (SU). The WQBELs of 6.5 to 8.5 from the previous permit are being rolled over in accordance with anti-backsliding requirements.

Temperature – Monitoring is required for process control and informational purposes.

Dissolved Oxygen – Monitoring is required for process control and informational purposes. See WQBEL section below for additional information.

5 day Carbonaceous Biochemical Oxygen Demand (CBOD5) – TOGS 1.3.3 and 40 CFR 133.102 requires that the 30 day (monthly) average be limited to 25 mg/L, the 7-day (weekly) average be limited to 40 mg/L, and the minimum monthly average percent removal be 85%.

Total Suspended Solids (TSS) – Requirements are identical to BOD5. TOGS 1.3.3 and 40 CFR 133.102 requires that the 30 day (monthly) average be limited to 30 mg/L, the 7-day (weekly) average be limited to 45 mg/L, and the minimum monthly average percent removal be 85%.

Settleable Solids – In accordance with TOGS 1.3.3 a limit of 0.3 is specified.

Ammonia – See WQBEL section below for additional information.

Phosphorus – See WQBEL section below.

Fecal Coliform – See WQBEL section.

Mercury – See WQBEL section below.

Action Levels – The action levels for the following parameters from the previous permit are being rolled over in accordance with anti-backsliding requirements and are sufficient to meet water quality based effluent limits as identified below. The action levels will be re-evaluated using concentration based effluent data during the next permit renewal process. See WQBEL section for more basis:

<u>Parameter</u>	<u>Action Level</u>	<u>Units</u>
Cyanide, Total	2.7	lbs/day
Phenolics, Total	5.4	lbs/day
Cadmium, Total	0.3	lbs/day
Chromium, Total	1.4	lbs/day
Copper, Total	4.1	lbs/day
Lead, Total	1.2	lbs/day
Nickel, Total	1.2	lbs/day
Zinc, Total	5.0	lbs/day
Di-N-Octylphthalate	1.0	lbs/day
Iron, Total	250	lbs/day

2. WQBELs & Anti-Degradation:

In addition to the TBELs previously discussed, the NYSDEC evaluated the discharge to determine compliance with Sections 101 and 301(b)(1)(C) of the CWA and 40 CFR 122.44(d)(1). These require that permits include limits for all pollutants or parameters which "are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." The limits must be stringent enough to ensure that water quality standards are met and must be consistent with any available wasteload allocation (WLA).

The procedure for developing WQBELs includes knowing the pollutants present in the discharge(s), identifying water quality criteria applicable to these pollutants, determining if WQBELs are necessary (reasonable potential), and calculating the WQBELs. Factors also considered in this analysis include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources. If the expected concentration of the pollutant of concern in the receiving water may exceed the ambient water quality standard or guidance value then there is reasonable potential that the discharge may cause or contribute to a violation of the water quality, and a WQBEL or WLA for the pollutant is required.

Antidegradation Policy: New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, entitled "Water Quality Antidegradation Policy," signed by the Commissioner of NYSDEC, dated September 9, 1985; and, (2) TOGS 1.3.9, entitled "Implementation of the NYSDEC Antidegradation Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985)." A SPDES permit cannot be issued that would result in the water quality criteria being violated. The permit for the facility contains effluent limits which ensure that the existing beneficial uses of the receiving waters will be maintained.

Following is the WQBEL analysis for each pollutant present in the discharge(s). Anti-degradation analysis which justifies applying water quality standards of a higher classification is noted below, if applicable. Refer to section II.B. above for information on discharge location, receiving water information (class, dilution, chemistry), and the existence of any TMDLs. A summary of this analysis is provided in the *Pollutant Summary Table* at the end of this fact sheet.

Pollutant-Specific WQBEL & Anti-Degradation Analysis

Outfall 001:

pH range – The current WQBEL limit of 6.5-8.5 is being carried over from the previous permit.

Temperature – The discharge is to non-trout waters and, typical of STPs, existing effluent quality is below 90 F. Therefore, a limit is not necessary (see 6 NYCRR 704.2(b)(1)(i)).

Dissolved Oxygen – A WQBEL effluent limit has been developed for Dissolved Oxygen. A daily minimum limit of 7.0 mg/l has been calculated from May 15 to Oct 15 since data suggests that this range should include the period when the DO concentration in the vicinity of the Wetzel WWTP drops below 4.0 mg/l. Oxygen neutral limits were previously developed to reflect an acceptable, equivalent UOD. The oxygen neutral limits are reflected in the WQBEL limits that have been developed for dissolved oxygen, CBOD₅ and Ammonia as discussed below. Monitoring for DO will be required during the period of October 16 to May 14. These requirements are being continued from the previous permit.

5 day Carbonaceous Biochemical Oxygen Demand (CBOD₅) – The current WQBEL effluent limits of 10 mg/l (monthly average) and 15 mg/l (7 day) have been retained from May 15 to October 15. WQBEL effluent limits of 25 mg/l (MA) and 40 mg/l (7 day) have been calculated for the period October 16 to May 14. These requirements are being continued from the previous permit.

Total Suspended Solids (TSS) – The current TBELs for TSS have been retained.

Settleable Solids – The narrative water quality standards provided in 6 NYCRR Part 703.2 state that the discharge of settleable solids shall not cause deposition or impair the receiving waters for their best usages. A Daily Maximum limit of 0.3 mL/L for settleable solids is included in the permit. This parameter is a measure of the proper design and operation of biological treatment facility without sand filtration. This requirement is being continued from the previous permit.

Ammonia – A water quality based effluent limit for Ammonia of 1.0 mg/l for the period May 15 to October 15 has been developed and is being continued from the previous permit. During the period October 16 to May 14 the permittee will be required to monitor only.

Phosphorus – In accordance with New York State's implementation of the 1987 Great Lakes Water Quality Agreement by the International Joint Commission the effluent concentration of total phosphorus will be limited to 1.0 mg/l on an average 30 day basis. The current limit of 1.0 mg/l is being continued from the previous permit.

Fecal Coliform – In accordance with TOGS 1.3.3, effluent disinfection is required because the discharge is to a class B water body. Geometric mean limits of 200/100 ml monthly average and 400/100 ml weekly average are specified. This requirement is being continued from the previous permit.

Mercury – Mercury was detected in the effluent at a level of 0.62 ng/L, which does not exceed the water quality standard of 0.7 ng/L. However, New York State's mercury multiple discharge variance (MDV) in TOGS 1.3.10 is being applied since the Wetzel Road WWTP is considered a high priority POTW. High priority is assigned to POTWs with a design flow of 5 MGD and greater, due to their higher flow rate and potential for these discharges to be influenced by industrial users and hauled wastes. The 5 MGD value is equivalent to the flow threshold employed by USEPA when determining the need for a pretreatment program. For POTWs with a design flow greater than 5 mgd the MDV

requires a 50 ng/L effluent limit; a high priority mercury minimization program requirement; and routine monitoring using EPA Method 1631. The following footnote has been added to the permit, consistent with the requirements for the MDV Term in TOGS 1.3.10, which states: "This permit may not be renewed or modified unless it incorporates requirements of either a new MDV or an Individual Discharge Variance (IDV), or include a limit of 0.70 ng/L." Refer to TOGS 1.3.10 for further details.

Whole Effluent Toxicity (WET) Testing – WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. The WET testing requirements are being added to the permit for the first time. The requirements for WET testing are detailed in the SPDES permit. Action Levels of 9.0 TUa and 60 TUC have been included in the draft permit for each species. The chronic limit/Action Level is equal to the chronic dilution ratio. The acute limit/Action Level is equal to 50% of the chronic dilution ration multiplied by 0.3. Per TOGS 1.3.2, WET testing is required when:

- Waste treatment plants exceed a discharge of 1 MGD.

The Reasonable Potential Determination (RPD) is applied to results of effluent toxicity data (minimum of 4 tests) to determine if a toxicity-based limit is required in the permit because of effluent variability. Toxicity testing should be placed in permits when chemical-based limitations are not adequate to regulate the discharge. A TRE will be required of the permittee if action levels or limits are exceeded at a 50% rate. During a TRE procedure, the limit may be deferred until the completion of the TRE to a time not to exceed five years from the initiation of the TRE. The permittees will be subjected to an RPD of their discharge data to determine if the effluent is likely to exceed an action level. This action level is based on a TUa of 0.3 and a TUC of 1 at the edge of the acute and chronic mixing zones respectively. If the RPD predicts an exceedance of the action level, the action level becomes the permit limit. Once the reasonable potential to exceed an action level is determined, the permit will be prioritized for modification (EBPS) and a WET limit (former action level) will be placed in the permit. In determining if a WET Limit can be established for an effluent, a situation may arise when the effluent has no acute or chronic toxicity. In cases when there is little dilution the multiplying factor may mathematically suggest a need for a WET limit. Since no toxicity in 100% effluent is essentially a non-detect, these data cannot be used to establish a WET limit. However, it is not recommended in these low dilution non toxic situations to drop toxicity testing from the permit because if any toxicity does occur in the discharge it may have serious impacts on the receiving water, and therefore the discharge requires monitoring. The action level would remain as such if the RPD indicated no need for a limit. The RPD multipliers are found in Table 1.

The evaluation for determining reasonable potential is as follows-

1. The action levels are determined for acute and chronic toxicity in the permit.
2. The permittee does a minimum of 4 tests in one year.
3. If no TRE is indicated, the data are subjected to an RPD. The most toxic result is identified.
4. NYSDEC Toxicity Testing Unit (TTU) uses the reasonable potential multiplier appropriate for the number of tests run to determine if the action level (potential limit) may be exceeded by the permittee. The RPD is done after 4 WET tests are submitted. Any single WET test may determine the need for a WET limit. If 10 or fewer tests are done, the RP multiplier is taken from Table 1. If more than 10 tests have been done the coefficient of variation is calculated and the multiplier is taken from Table 3.2 in the Technical Support Document for Water Quality-based Toxics Control EPA/505/2-90-001 March 1991.
5. If the action level is exceeded, the TTU recommends to the Permit writer that the permit be prioritized for modification to incorporate a WET limit into the permit. If the action

level is not exceeded after application of the Reasonable Potential multiplier, no limit is required.

6. Note that all other requirements such as TREs apply. A limit may be deferred while the permittee is conducting a TRE. An example of how the data for a determination of reasonable potential appears in Appendix VI of TOGS 1.3.2.

Other

Water quality based effluent limits were calculated for each of the parameters identified in the following table. The ambient water quality standards listed were obtained from 6 NYCRR Part 703 and TOGS 1.1.1. The WQBEL was calculated by multiplying the water quality standard by a dilution factor of 60:1. The Action levels in the permit are below the calculated WQBELs and have therefore been carried over from the current permit.

<u>Parameter</u>	<u>Ambient Water Quality Standard (mg/l)</u>	<u>Water Quality Based Effluent Limit (mg/l)</u>	<u>Water Quality Based Effluent Limit (lbs/day)</u>
Cyanide, Total	0.0052-C	0.312	18.2
Phenolics, Total	0.005-UN-E	0.300	17.5
Cadmium, Total	0.0043-C	0.2836	16.6
Chromium, Total	0.157-C	9.42	549.9
Copper, Total	0.0196-C	1.176	68
Lead, Total	0.0101-C	0.766	44.7
Nickel, Total	0.1129-C	6.794	396.6
Zinc, Total	0.180-C	10.95	639.3
Di-N-Octylphthalate	No Std./Guidance Value	No Std./Guidance Value	-
Iron, Total	1.0-C	60.0	3502.8

B. Monitoring & Reporting Requirements

Section 308 of the Clean Water Act and federal regulations 40 CFR 122.44(i) require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and for reporting results on DMRs. The permit contains the monitoring requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

C. Other Conditions Specific To This Permit

Best Management Practices for Sanitary Sewer Systems with Active Overflows: Due to two sanitary sewer system bypasses (Sawmill Pump Station bypass and Treatment Plant Bypass – after primary treatment) the permittee will be required to maintain best management practices for sanitary sewer systems.

Permittee: Onondaga County Water Environment Protection
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Date: August 2012
Permit Writer: John Weidman
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Industrial Pretreatment Program: The permittee is required to implement a Pretreatment Program in accordance with 40 CFR 403. The program specifies development of an industrial user compliance program, submission of user information, modification of local sewer use law (if necessary), and periodic reporting. This requirement is based on 40 CFR 403 and TOGS 1.3.3 and is being continued from the previous permit.

Discharge Notification Act: In accordance with Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters. The permittee is also required to provide a public repository for DMRs as required by the SPDES permit. This requirement is being continued from the previous permit.

Stormwater Pollution Prevention Plan: POTWs with a design flows at or above 1.0 mgd with stormwater outfalls are required to develop a stormwater pollution prevention plan to minimize contamination of stormwater run-off from the facility. There are two stormwater outfalls at the Wetzel Road WWTP.

D. General Conditions Applicable To All Permits

The permit contains standard regulatory language that is required to be in all SPDES permits. These permit provisions, based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750, include requirements pertaining to monitoring, recording, reporting, and compliance responsibilities. These "general conditions" of permits are typically specified, summarized, or referenced on the first and last pages of the permit.

Permittee: Onondaga County Water Environment Protection
 Facility: Wetzel Road Wastewater Treatment Plant
 SPDES No: NY0027618

Date: August 2012
 Permit Writer: John Weidman
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OUTFALL & RECEIVING WATER LOCATION TABLE

Outfall Information					Receiving Water Information								
Outfall #	Latitude	Longitude	Flow Rate (MGD)		Name	Class	Water Index Number	Water Quality Data					
	°, ', "	°, ', "	Average	Maximum or Design				7Q10 (MGD)	30Q10 (MGD)	Dilution/ Mixing	pH	Temp (°F)	Hardness (mg/l)
001	43, 08, 52	76, 14, 12	2.35	7.0	Seneca River	B	ONT-66-12	420*		60:1	-	-	~250

* From Chuck St. Lucia – May 2004

POLLUTANT SUMMARY TABLE(S)

Outfall	001 (May 15 to October 15)
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Type of Treatment:	Advanced secondary treatment using a Biological Aerated Filter (BAF) System. Treatment process includes screening and grit removal, primary clarifiers, BAFs, cloth media disk filtration, UV disinfection (seasonal).
and	
Sludge Handling:	Gravity thickener tanks, anaerobic digesters. Primary sludge is currently removed via tanker truck and hauled to the Metro-Syracuse WWTP for additional treatment.

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	Existing Effluent Quality				Technology Based Effluent Limit				Water Quality Based Effluent Limit				Permit Basis (T or WQ)
	concentration		mass		Conc.	Mass	Type	Basis	AWQC conc.	Effluent		Type	
	Avg	Max	Avg	Max						conc.	mass		
Whole Effluent Toxicity (WET) TESTING									Recommended?	YES			WQ
Flow Rate, units = MGD	Average	2.34	Maximum	3.8	7.0		MA	BPI, TOGS 1.3.3	-	-			T
pH (SU)	Minimum	7	Maximum	8.4	6.5 – 8.5		Range	40 CFR133. 102(c)	6.5-8.5	Apply TBEL			T
CBOD ₅ (30 day), mg/l, lbs/day	2.2	3	43.6	100	10	584	MA	R (WQ)	DO = 4.0 *	10.0 ²	—	DA	WQ
CBOD ₅ (7 day), mg/l, lbs/day	3.2	7	67.6	200	15	876	DM	R (WQ)	-	-			T
UOD, (), mg/l, lbs/day					-	-		TOGS 1.3.3					
TSS (30 day), mg/l, lbs/day	3.55	6	69	100	30	1752	MA	R - 40 CFR 133.102	Narrative Std ¹	—	—	—	T

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TSS (7 day), mg/l, lbs/day	4.95	12	102	200	45	2628	DM	R - 40 CFR 133.102					T
Solids, Settleable, ml/l	0.1	0.1	-	-	0.3		DM	R - TOGS 1.3.3	Narrative Std ¹	---	----	---	T
Nitrogen, Ammonia (as NH ₃), mg/l	0.17	0.27			1.0		MA	R (WQ)	DO = 4.0 ⁺	1.0 ²	----	DM	WQ
Nitrogen, TKN (as N), mg/l	1.0	2.1			Monitor		MA	R	-				T
Phosphorus, Total (as P), mg/l	0.38	0.75			1.0		MA	R (WQ)	1.0 - GLWQA	1.0	---	MA	WQ
Temperature, Deg C	16	21			Monitor		DM	R	-				T
Dissolved Oxygen (Minimum), mg/l	8.78	7.6 (min)			7.0		Minimum	R (WQ)	DO = 4.0 ⁺	>=7.0	---	D Min.	WQ
Effluent Disinfection: [] All Year [X] Seasonal from: 5/15 - 10/15													
Fecal Coliform(30 day/7 day), #/100 ml	4/30	20/200			200/400		GM	6NYCRR 703.4	200-Part 703.4	200*	---	---	T
Chlorine, Total Residual, mg/l	-	-			-			No limit - UV Disinfection	Not Applicable				

Outfall 001 (October 16 – May 14)

Type of Treatment:	Advanced secondary treatment using a Biological Aerated Filter (BAF) System. Treatment process includes screening and grit removal, primary clarifiers, BAFs, cloth media disk filtration, UV disinfection (seasonal).
and	
Sludge Handling:	Gravity thickener tanks, anaerobic digesters. Primary sludge is currently removed via tanker truck and hauled to the Metro-Syracuse WWTP for additional treatment.

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	Existing Effluent Quality				Technology Based Effluent Limit				Water Quality Based Effluent Limit				Permit Basis (T or WQ)
	concentration		mass		Conc. (mg/l)	Mass (lb/day)	Type	Basis	AWQC	Effluent		Type	
	Avg	Max	Avg	Max					conc.	conc.	mass		
Whole Effluent Toxicity (WET) TESTING									Recommended?		YES		WQ
Flow Rate, units = MGD	Average	2.34	Maximum	3.8	7.0		MA	BPI, TOGS 1.3.3	-	-			T
pH (SU)	Minimum	7	Maximum	8.4	6.5 – 8.5		Range	40 CFR133. 102(c)	6.5-8.5	Apply TBEL			T

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CBOD ₅ (30 day), mg/l, lbs/day	2.2	3	43.6	100	25	584	MA	R - 40 CFR 133.102	DO = 4.0 ⁺	25.0			WQ
CBOD ₅ (7 day), mg/l, lbs/day	3.2	7	67.6	200	40	876	DM	R - 40 CFR 133.102					T
TSS (30 day), mg/l, lbs/day	3.55	6	69	100	30	1752	MA	R - 40 CFR 133.102	Narrative Std ¹	Apply TBEL			T
TSS (7 day), mg/l, lbs/day	4.95	12	102	200	45	2628	DM	R - 40 CFR 133.102					T
Solids, Settleable, ml/l	0.1	0.1	-	-	0.3		DM	R - TOGS 1.3.3	Narrative Std ¹	Apply TBEL			T
Nitrogen, Ammonia (as NH ₃), mg/l	0.17	0.27			1.0		MA	R (WQ)	2.20	Apply TBEL			T
Nitrogen, TKN (as N), mg/l	1.0	2.1			Monitor		MA	R					T
Phosphorus, Total (as P), mg/l	0.38	0.75			1.0		MA	R (WQ)	1.0 - GLWQA	1.0	----	MA	WQ
Temperature, Deg C	16	21			Monitor		DM	R					T
Dissolved Oxygen (Minimum), mg/l	8.78	7.6 (min)			None			R (BPJ)	Not Required				T
Effluent Disinfection: [] All Year [X] Seasonal from: 5/15 - 10/15													
Fecal Coliform(30 day/7 day), #/100 ml	4/30	20/200			200/400		GM	6NYCRR 703.4	200-Part 703.4	200*	----	----	T
Chlorine, Total Residual, mg/l	-	-			-			No limit - UV Disinfection	Not Applicable				

+ - Part 703.3;

1- Apply TBEL equal to 10 mg/l (BPJ);

2. Equivalent Oxygen Neutral Limit per Onondaga County (E. Coyle memo-3/9/2004); GLWQA – Great Lakes Water Quality Agreement;

* - Monthly geometric mean from a minimum of 5 examinations.

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Outfall	001 (continued)
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Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	Existing Effluent Quality (EEQ)				Technology Based Effluent Limit (TBEL)					Water Quality Based Effluent Limit				Permit Basis (T or WQ)
	concentration		mass		Conc (mg/l)	Mass (lb/day)	Type	PQL conc.	Basis	AWQC conc.	Effluent		Type	
	Avg/Max	95th/99th	Avg./Max	95th/99th							conc. (mg/l)	mass (lb/day)		
Cyanide, Total			0.08/0.2	0.18/0.22	Monitor	2.7	AL		R (BPJ)	0.0052-C	0.312	18.2	DM	T
Phenolics, Total			0.34/1.1	0.74/0.95	Monitor	5.4	AL		R (BPJ)	0.005-UN-E	0.300	17.5	MA	T
Cadmium, Total			0.02/0.06	0.05/0.06	Monitor	0.3	AL		R (BPJ)	0.0043-C	0.2836	16.6	DM	T
Chromium, Total			0.2/0.44	0.36/0.43	Monitor	1.4	AL		R (BPJ)	0.157-C	9.42	550	DM	T
Copper, Total			0.25/0.55	0.44/0.53	Monitor	4.1	AL		R (BPJ)	0.0196-C	0.0204	1.2	DM	T
Lead, Total			0.06/0.21	0.14/0.18	Monitor	1.2	AL		R (BPJ)	0.0101-C	0.766	44.7	DM	T
Nickel, Total			0.36/0.82	0.64/0.77	Monitor	1.2	AL		R (BPJ)	0.1129-C	6.794	397	DM	T
Zinc, Total			0.53/1.1	0.94/1.15	Monitor	5.0	AL		R (BPJ)	0.180-C	10.95	639	DM	T
Di-N-Octylphthalate (lb/day)			0.14/0.3	0.27/0.34	Monitor	1.0	AL		R (BPJ)	No Std./Guidance Value				
Iron, Total			1.56/2.91	2.63/3.24	Monitor	250	AL		R (BPJ)	1.0-C	60.0	3503	DM	T
Mercury (one time sample collected on 1/11/2012)	0.62 ng/l				50 ng/l		DM		TOGS 1.3.10	0.7	0.7 ⁺⁺	-----	DA	T/WQ

C- Aquatic Chronic

UN-E: Unchlorinated – Aesthetic

++- Recommend effluent limit of 50 ng/l per TOGS 1.3.10.